

REMARKS

Status of Claims

Claims 19-61 are pending. Claims 19-57 and 60 are amended. No new matter is entered.

Interview Summary

Applicants thank the Examiner for the courtesies extended during an in-person interview with the undersigned attorney on March 19, 2009. The arguments and amendments presented here represent the substance of the interview.

Support for Claim Amendments

The claims are amended to clarify that the cutting edge form an outermost surface of the surgical tool and have the recited low porosity. Although the specification does not use the term “outermost,” it inherently defines “cutting surface” or “cutting edge” as forming an outermost surface on surgical tools. Among other teachings:

1. Passages discussing a cutting edge “coming into contact with tissue” necessarily describe an outermost surface, because only an outermost surface of a surgical tool comes into contact with tissue during an incision:
 - A. Page 2, lines 11-14: “Prion removal is hampered by surfaces having a porosity that aids entrapment or attachment and inhibits cleaning. It is therefore desirable to produce a surgical tool having a cutting edge and surfaces in contact with tissue to be fabricated from materials having a sub-ferrous porosity.”
 - B. Page 7, lines 7-9 (as amended herein): “The surface porosity of a cutting edge or other surface areas coming into contact with tissue during a surgical incision must be decreased below about 10-12 nm and preferably below about 50 angstroms to inhibit prion loading.”
2. Page 7, lines 14-17 (as amended on national stage entry): “[D]econtamination by mechanical means, such as washing, is increased in its effectiveness as the porosity of the surface is decreased. Mechanical washing of the instrument with

compounds such as formaldehyde, benzene, ethanol and other compounds known in the art is significantly more effective if the porosity of entrapment surfaces is diminished.” This passage necessarily refers to an outermost surface, because only outermost surfaces are exposed to treatment during a mechanical washing procedure.

2. Figs. 1-14 show cutting edges 103, 122, 132, 142, 152, 162, 172, 182, 192, 202, 212, 222, 232, and 242 (respectively), each exposed and uncovered by any other layer.
3. Page 6, lines 5-7: “This sub-ferrous porosity of cutting surfaces will have a tendency to exclude pathogens, such as prions, from attachment or entrapment of any sort.” This passage necessarily refers to an outermost surface, because only an outermost surface of a surgical tool faces the risk of attachment or entrapment; any “surfaces” below the outermost surface are shielded from pathogens by the outermost surface.

So the Figures and the cited passages from the specification show that Applicants were referring to outermost surfaces when describing their inventive surface porosity. Identical disclosure was included in provisional application ser. no. 60/404,513, of which 35 U.S.C. § 119(e) benefit is claimed.

Claim Rejections: 35 U.S.C. § 102

Claims 19-31, 43-49, and 59-61 were rejected under 35 U.S.C. § 102(b) as reciting subject matter anticipated by U.S. Pat. No. 4,770,067 to Liu et al.

During the interview, the Examiner agreed that Liu’s outermost surface is a non-stick coating (290 in Fig. 2), and that Liu is silent as to its porosity. Liu therefore does not disclose a surgical tool with a cutting edge that forms an outermost surface of the tool and has the recited low porosity.

Claim Rejections: 35 U.S.C. § 103(a)

Claims 32-42 and 50-58 were rejected under 35 U.S.C. § 103(a) for reciting subject matter unpatentable over Liu et al. The Examiner took the position that the specific material

properties claimed (composition, density, etc.) and various preparation methods would have been obvious to one of ordinary skill in the art.

These claims either depend from claim 19, as amended, or else recite all limitations of claim 19 as amended, including the requirements that the cutting edge form an outermost surface of the tool and have the recited low porosity. Because Liu does not disclose an outermost surface having the recited porosity, it does not meet all elements of the claims, even if combined with “routine” knowledge in the art cited by the Examiner.

The claimed subject matter is therefore novel and not obvious, and Applicants ask the Examiner to withdraw the rejections.

Respectfully submitted,

Date: March 21, 2009
Customer No: 25181
Patent Group
Foley Hoag, LLP
155 Seaport Blvd.
Boston, MA 02210-2600

/SCOTT E. KAMHOLZ/
Scott E. Kamholz, Reg. No. 48,543
Attorney for Applicants
Tel. No. (617) 832-1176
Fax. No. (617) 832-7000